



PIPPA DE SALIS

IRIDIUM

Element Symbol: **Ir**

Atomic Number: **77**

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Iridium is arguably the most colourful element on the periodic table. It takes its name from the Greek word Iris and translates as “of rainbows”. Salts and compounds of iridium come in all different colours.

Iridium was discovered in 1803 by Smithson Tennant, an English chemist who also discovered the element Osmium. Tennant was appointed as a Professor of Chemistry in Cambridge in 1813 but died after delivering only one lecture course when a bridge in France over which he was riding collapsed.

Iridium is one of the rarest elements on Earth, however, an unusually high abundance is found all around the planet in a layer of soil that has been associated with the meteorite that caused the extinction of the dinosaurs 65 million years ago. The iridium at this layer in the soil is believed to have come from the meteorite.

Iridium is the most corrosion-resistant metal known. Iridium is found in nature as a metal or as an alloy. One of the more common alloys, Osmiridium, is an osmium rich alloy of iridium and osmium. Osmiridium was mined near Lake Pedder in Tasmania during the Second World War and this single mine was once one of the world’s major producers of this rare metal.

Because of its rarity, uses of iridium have been confined to specialised spark-plugs and electrodes. However, recently, complexes of iridium have found use in a new display technology – Organic Light Emitting Diodes (OLEDs). Very thin films of organic materials doped with small amounts of iridium complexes can be made into displays and lights which outperform LCD and plasma displays and fluorescent lights. The continued development of OLEDs will enable roll-up television screens and flexible lighting and it is highly likely that iridium will be a key component of many of these devices.

Provided by the element sponsor Scott Watkins

ARTISTS DESCRIPTION

Named after the Greek god Iris and translating as ‘of rainbows’, compounds of Iridium are arguably the most brightly coloured of all elements. The linocut creates bold marks to draw the gaze and to clarify a relatively small image and the colour is added to the prints via chine colle.

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